

SUSSEX COUNTY

REFERENCE TIDE GAUGE - LEWES

The Lewes tide gauge is located on the bay side of Cape Henlopen in Breakwater Harbor.

Delaware Bay

For the Delaware Bay shoreline in Sussex County, high tides occur about 25 minutes later at the Mispillion River (the north end of the county) than at the Lewes gauge. Low tides occur around 50 minutes later.

Oceanfront

The high and low tides on the oceanfront occur up to around 1 hour earlier than the high and low tides at the Lewes gauge.

Back bays

The back bays of Sussex County are Rehoboth Bay and Indian River Bay (both of which drain through the narrow Indian River Inlet), and Little Bay and Little Assawoman Bay (both of which drain into Maryland's Assawoman Bay to the south).

High tides on the back bays of Sussex County occur up to about 2½ hours later than the high tides at the Lewes gauge. Low tides occur up to about 3 hours later.

The back bays present a problem during prolonged periods of onshore flow. For each successive tide cycle that the back bays are not allowed to drain, the water levels increase.

Data Acquisition

In order to access data from the Lewes gauge, use the National Ocean Service web site at <http://tidesonline.nos.noaa.gov/> or the Advanced Hydrologic Prediction Service site at <http://water.weather.gov/ahps2/index.php?wfo=phi>.

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The tide heights from actual events referenced in the following table are those that were verified by the National Ocean Service.

In the table an asterisk (*) indicates that location experiences back bay type flooding. Being that the reference gauge is on Delaware Bay, the tide level associated with that particular location may vary somewhat from event to event based on the number of tide cycles during which there is an onshore flow.

THE PERIOD OF RECORD FOR THE LEWES GAUGE BEGINS IN JANUARY 1919. PLEASE NOTE THAT THERE ARE GAPS WITHIN THE PERIOD OF RECORD DUE TO EQUIPMENT OUTAGES AND/OR DATA AVAILABILITY.

ALL HEIGHTS ARE IN MEAN LOWER LOW WATER (**MLLW**).

- 9.3 FT — January 23, 2016
- 9.2 FT — March 6, 1962
- 8.8 FT — January 4, 1992
- 8.7 FT — October 29, 2012 (Post Tropical Cyclone Sandy)
- 8.6 FT — January 28, 1998
- 8.5 FT — February 5, 1998
- 8.0 FT — MAJOR TIDAL FLOODING BEGINS.**

At this level, flooding starts to become severe enough to begin causing structural damage along with widespread flooding of roadways. Vulnerable homes and businesses may be severely damaged or destroyed as water levels rise further above this threshold. Numerous roads become impassable and some neighborhoods may be isolated. The flood waters become a danger to anyone who attempts to cross on foot or in a vehicle.

September 27, 1985 (Hurricane Gloria)

March 3, 1994

August 27, 2011 (Hurricane Irene)

- 7.9 FT — October 25, 1980
March 29, 1984
- 7.8 FT — December 12, 1992
January 7, 1996
November 13, 2009
- 7.7 FT — May 12, 2008
October 29, 2011
- 7.6 FT — October 22, 1961
October 14, 1977
February 17, 2003
- 7.5 FT — October 31, 1991
October 2, 2015
- 7.4 FT — September 18, 1936 (Hurricane)
November 3, 1962
December 22, 1972
January 2, 1987
November 14, 1997
January 25, 2000
October 7, 2006

- 7.3 FT — December 9, 1973
October 8, 1996
October 17, 2009
June 4, 2012
March 6, 2013
- 7.2 FT — January 13, 1964
September 25, 1992 (Tropical Storm Danielle)
May 25, 2005
February 9, 2016
- 7.1 FT — November 10, 1969
January 31, 2006
December 19, 2009
December 9, 2014
- 7.0 FT — MODERATE TIDAL FLOODING BEGINS.**
At this level, widespread flooding of roadways begins due to high water and/or wave action with many roads becoming impassable. Lives may be at risk when people put themselves in harm's way. Some damage to vulnerable structures may begin to occur.
November 1, 1947
February 26, 1979
November 15, 1981
December 2, 1986
October 19, 1989
January 3, 2003
- 6.8 FT — Flooding begins in Milford along the Mispillion River.
Flooding begins in Broadkill Beach, including DE Route 16.
Flooding begins in Rehoboth Beach along Surf Avenue and along the Boardwalk.
Flooding begins in Millsboro.
- 6.6 FT — Flooding begins in Milton along the Broadkill River.
Flooding begins along Sussex County Route 360 and Salt Pond Road* (both are just north of Bethany Beach).
- 6.4 FT — Flooding begins around the Mispillion Light.
Flooding begins in Slaughter Beach.
Flooding begins in Primehook Beach and along Primehook Road.
Flooding begins along Bay Avenue, Cedar Street and Pilottown Road in Lewes.
Flooding begins along Savannah Road (Business US Route 9) in Lewes in the vicinity of the Lewes and Rehoboth Canal.
Flooding begins in Oak Orchard, including Sussex County Route 312*.
Flooding begins in Long Neck, including DE Route 23*.
- 6.3 FT — COASTAL FLOOD ADVISORY THRESHOLD.**

- 6.2 FT — Flooding begins at Old Landing on Rehoboth Bay*.
 Flooding begins along sections of DE Route 1 between Dewey Beach and Bethany Beach, including the Delaware Seashore State Park*.
 Flooding begins in Dewey Beach*, Bethany Beach and South Bethany*.
 Flooding begins in Fenwick Island*, including DE Route 54.
- 6.0 FT — MINOR TIDAL FLOODING BEGINS.**
- 2.0 FT — LOW WATER ADVISORY THRESHOLD.**
- 3.0 FT — December 8, 1939
 March 5, 1954
 December 31, 1962
 December 22, 1976
 January 11, 1977
 December 10, 1977
- 3.1 FT — January 25, 1939
 November 30, 1958
 January 28, 1963
- 3.2 FT — January 6, 1959
 March 16, 1980
- 3.4 FT — January 28, 1971
- 4.2 FT — January 10, 1978